CUS-0272/A
copy 7 of 8

25 May 1959

MEMORANDUM FOR THE RECORD:

SUBJECT: "Follow-On" Evaluation Criteria

1. Based on:

(a) Memo for Record, dated 25 May 1959, subject "Follow-On Operational Considerations;"

The criteria listed below is forwarded for use in the evaluation of a "Follow-On" vehicle.

2. (a) Speed: Highest possible, consistent with altitude, range, weight, availability and cost. Minimum acceptable M-1.8; desired M-3.

(b) Range: 9,500 N. M. is desired. Minimum acceptable is 5,600 N. M.

(c) Altitude: Minimum acceptable at the beginning of the period (1960) is 90,000 feet. Growth potential to provide 120,000 feet at the end of the period (1963-5) is desired.

(d) Employment: Ability to operate from one Z. I. base is desired. Recovery at a USAF controlled overseas base or on an aircraft carrier is permissible providing the capability to expeditiously dismantle the vehicle is available. The ability to ferry the dismantled vehicle in an existing and available cargo type of aircraft is required.

(e) Radar Immunity: Every effort should be made to provide immunity from radar detection at all altitudes. Inability to obtain desired results should not be cause for cancellation or delay.

25X1D

[redacted]

(g) Maneuverability: The vehicle must be capable of accomplishing area photographic coverage and perform evasive action.

(h) Turn Around Time: After a 24-hour alert, the ability to perform a mission on a 12±6 and 4-hour basis is required. An approximate 2-3 hour turn around time is desired.

(i) System Availability: Primary mission capabilities including ground data reduction equipment should be available and ready for

operational use during the aircraft test phase. Qualitative characteristics of the end results should be consistent with the job to be done, equal to and/or better than that of CHALICE.

(j) Payload Provisions: Provisions for a 500 lb. payload and space of approximately 4' x 4' x 2½' is required. Every effort should be made to incorporate provisions to insure rapid interpretation, dissemination and storage of collected data.

(k) Navigation System:

(1) A self-contained automatic inertial navigation device is required which will provide continuous position fixing at all altitudes. It is desired that the navigation system provide present position, time and heading to points enroute, and nadir point location. Nadir point location, accurate within one degree of the vertical, is desired, providing it does not add significant complexity to the system.

(2) In order to geographically position, identify, and correlate the various types of reconnaissance information collected, an automatic indexing capability synchronized and correlated with the navigational system is required.

(l) Fatigue: All known factors contributing to fatigue should be adequately provided for in order to allow the pilot to devote full attention to primary mission accomplishment.

(m) Escape System: A capsule type cockpit is desired. Minimum acceptable is a full pressure, high altitude suit arrangement with a tumble free ejection seat.

(n) Logistics: Should consider the following: maintenance, ground handling characteristics and equipment, sortie rate, in commission rate, type fuel, personal equipment, hangar space, cargo space, ability to disperse and/or deploy for staging, spare parts and/or replacement, and attrition rate.

25X1A9a

[redacted]
Colonel, USAF
Chief, Operations Branch, DPD

DPD-ID/P:ASS/sm